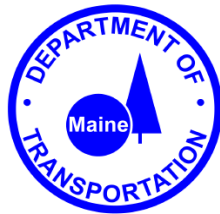


BUREAU OF PROJECT DEVELOPMENT

Transportation Improvement Program 2002 Delivery Report



**Urban &
Arterial**

Bridge

Multimodal

Regional



**Contracts &
Specifications**

**Program
Support
Services**

**Materials
Testing &
Exploration**

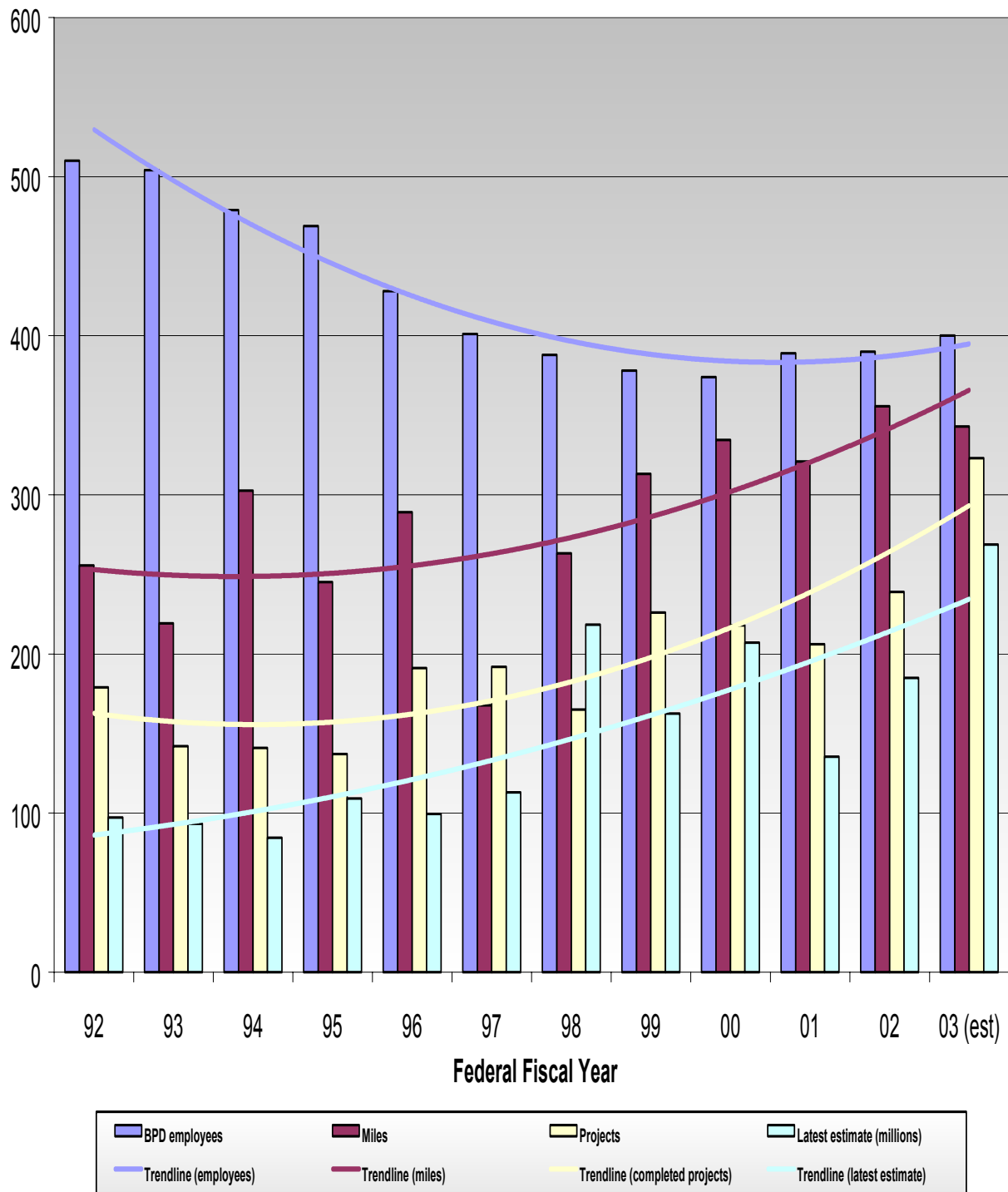
**Capital
Resources**

**Federal Fiscal Year (FFY) 2002
(October 1, 2001 - September 30, 2002)**

December 2002

Bureau of Project Development

Project Completion vs. Human Resources



To Bureau staff, MaineDOT managers and our many transportation customers:

This is the third report of yearly accomplishments by the Bureau of Project Development. Bureau employees reached new heights in 2002 delivering safe, cost effective, quality transportation projects in a timely manner. The Bureau has also continued to change internally, more effectively serving transportation customers and more efficiently delivering our program.



The Bureau's journey of management and process change, as outlined in earlier reports, continues to show improved results. Program delivery during 2002, measured in this case as projects successfully beginning the construction phase, reached new production levels in each of our primary measurement areas:

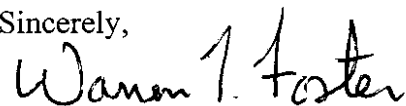
- ◆ 285 projects delivered, with
- ◆ \$229M total value, involving
- ◆ 346 miles of roadway work.

This output includes 93 miles of highway construction, 52 bridge crossing projects, 28 multimodal projects, and 21 environmental and traffic projects.

One of our more ambitious projects begun this year (see picture above) involves replacement of 3 bridges crossing the Kennebec River between Fairfield and Benton. We also have tackled major transportation improvement projects in Searsport at the Mack Point Cargo Pier, in Prospect-Verona on the suspension bridge over the Penobscot River, in Moscow and Caratunk along nearly 2 miles of U.S. Route 201. The new 3rd bridge project in Augusta is underway connecting I-95 with coastal Route 3 and we are improving major sections of U.S. Route 1 both north and south of Danforth. We expect in 2003 to continue delivering a high volume of work to Maine's transportation customers. Our schedule for new work includes 45 additional projects, \$60 million additional dollars and 50 more highway improvement miles beyond the 2002 results outlined above.

Bureau employees and all those involved with us in delivering the transportation improvement program are successfully meeting ever-increasing demands for safety, mobility and efficiency despite limited resources. Our focus must remain on people. I'm sure that the Bureau's employees will continue to respond to the challenges before them as they are presented with new opportunities to be innovative, take risks, and improve results.

Sincerely,



Warren T. Foster, P.E.

Director, Bureau of Project Development

Bureau of Project Development

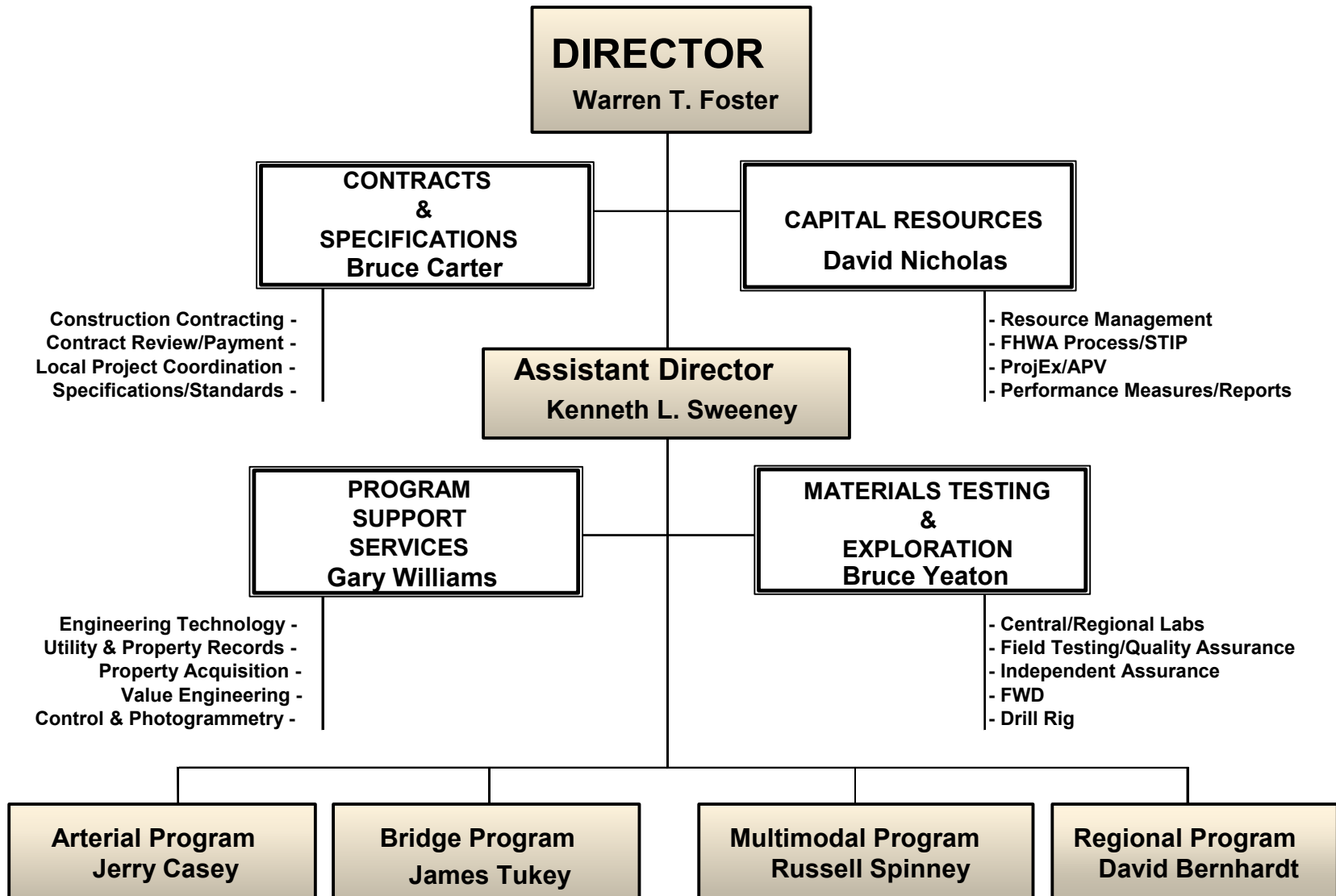


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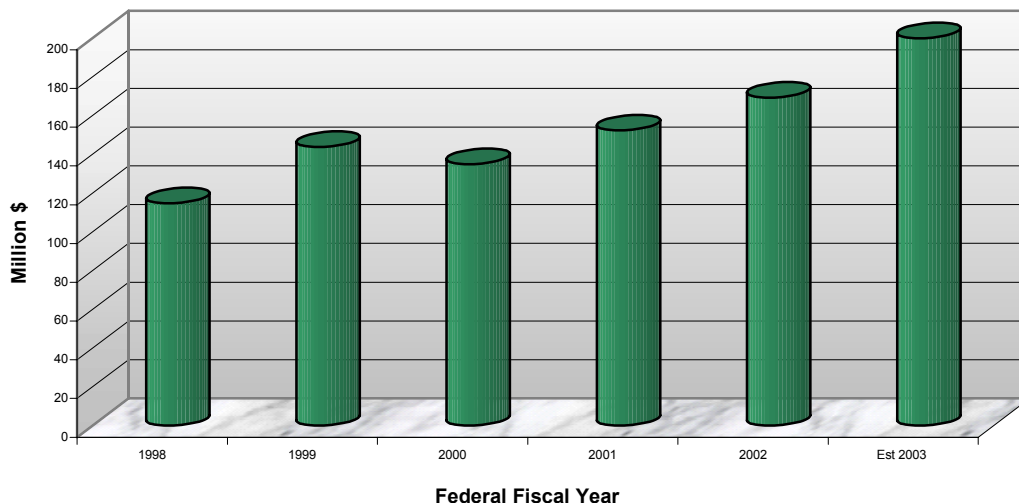
Introduction:

This Report summarizes delivery of Maine's Transportation Improvement Program and the work of Bureau of Project Development employees during 2002. Each of the Bureau's organizational units (see chart on opposite page) is highlighted with a summary of their accomplishments this past year. Inside the front cover you can see that we have continued to complete projects at increasing levels compared to recent years, while Bureau staffing has remained nearly flat. Below is a chart that testifies to the value of this effort in terms of construction contract payments. This measurement too has been rising and is expected to approach \$200 million for the first time in 2003.

Both the Federal Highway Administration and the American Road and Transportation Builders Association equate \$1 million in transportation investment to about 42 person years of employment. Construction payments now run about 80% of total project value, the remaining 20% being engineering and right-of-way costs. This suggests that 2002 production as shown below has produced over 8,880 jobs throughout the economy. The 2002 figure includes 2,750 more jobs than the recent past annual average and is forecast to increase by another 1,400 jobs in 2003. Jobs created in this way are categorized as direct project jobs, indirect jobs in industries that supply or provide services to project contractors and jobs supported by individuals working direct and indirect jobs as they participate in the Maine economy.

Construction Contract Payments

TRANSPORTATION IMPROVEMENT PROGRAM

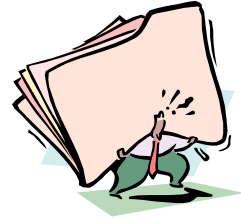


Contracts & Specifications

The Contracts & Specifications Unit (Contracts) supports Bureau programs and assists many other areas of the MaineDOT such as construction contracting, contract review/payment, consultant contracts, municipal-state agreements, utility agreements, local project coordination, and specifications/standards. This Unit produced a record number of contracts, while managing continuous change and refinement of its procedures.

Highlights and accomplishments during this past year include:

- ***Process streamlining and technological innovation:***
 - Strengthened the contractor prequalification and evaluation process
 - Implemented electronic advertising (annual savings over: \$113,000)
 - Automated the bid amendment notification process
 - Introduced electronic bidding as an alternative to traditional paper process
 - Reduced contract agreement execution time by an average of 1-2 weeks
 - Reduced contractor payment turnaround time from 30 days to 9 days
 - Expanded use of electronic field reporting and documentation
 - Began revising agreement templates involving municipalities, Gateway projects, etc.
 - Improved the consultant registration and selection process
 - Implemented innovative contracting processes for a wide range of expert services with multi-year General Consultant Agreements and Task Order Contracts, thus allowing on-call services and minimizing bureaucracy while maintaining full opportunity for consultants to compete.
- ***Produced draft consultant procedures manual***
- ***Wrote entirely new standard specifications book (first re-write in at least 7 years)***
- ***Developed consultant contract “boiler-plate”, or general conditions***
- ***Expanded contracts web page to include:***
 - Reference material and resource documents
 - Project and bid schedules
 - Electronic advertising and bidding
 - Bidding results and schedule of items going back 2 years
 - Automated construction contractor pre-qualification forms
- ***Certified 120 municipalities and consultants to deliver locally administered projects***
- ***Developed first ever locally administered projects (LAP) manual***
- ***Created capacity to deliver traffic and environmental contracts.***
- ***Championed innovative construction technique (Tire Chips)***



Negotiated MaineDOT-MaineDEP Agreement and developed first of its kind contract as part of collaborative effort with the University of Maine and the MaineDEP for using 1300 tons of Type A tire chips in an innovative highway construction project. More such projects are likely to come.

Contracts employees have and will continue to face many challenges from their position at the delivery end of our contracting and payment processes.

Program Support Services

The Program Support Services (P.S.S.) Unit supports Bureau Programs and the Department in a variety of areas including engineering systems support, geodetic control surveys, photogrammetry, condemnations, r/w research, r/w mapping support, public hearing displays, utilities and value engineering.

P.S.S. highlights and accomplishments during this past year include:



Right of Way Research, Documents & Condemnations Group:

- Reduced a backlog of unrecorded right of way plans, approximately 725 plan sheets.
- Processed 80 projects involving 1,045 parcels with payments over \$5.9 million.
- Responded to over 2,400 internal and external requests for r/w related information.

Utilities & Railroad Services Group:

- Received FHWA approval for the MDOT Utility Accommodation Manual culminating many months work that directly involved numerous utility companies.
- Processed approximately 482 Utility permits for installation, or relocation of utilities.

Public Hearings Display Group:

- Produced 109 hearing plans and handled numerous inquiries for a variety of services.
- Developed a “fly-through” presentation of the Augusta Third Bridge project, which was extremely helpful in the planning process and was presented upon request numerous times.

Value Engineering Group:

- Completed a VE study on the Portland Connector project with approval of more than \$1.8 million in savings on a \$15 million project.
- One contractor-initiated VE change proposal was also approved, saving over \$18,000 and one non-project study was performed to review the use of gabion walls.

Photogrammetry & Control Group:

- Processed survey information for more than 225 projects, processed and tracked survey books and files for more than 330 projects, established control points for more than 125 projects.
- Flew and/or processed aerial photography for over 85 projects, delivered nine photogrammetric mapping jobs, scanned & compressed over 2,500 aerial photographs.
- Observed eight fathometer jobs, and completed three noise studies.

Engineering Support Services Group:

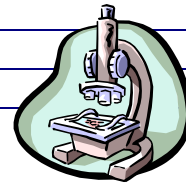
- Formed July 1, 2002 by merging staff from the Information Systems Division and the Bureau. Managers from each jointly develop priorities and work schedules.
- Support and training was provided to CADD users throughout the MaineDOT. Training was given to approximately 65 users of either Microstation or MX in 2002.
- Several initiatives will be completed in 2003 including, implementation of a new CADD plotting system, preparations for a major upgrade of the MaineDOT's CADD software, updating of the CADD infrastructure to support the MaineDOT's conversion to U.S. Customary Units, evaluation of software systems to help store and access files.

Materials Testing and Exploration

The Materials Testing and Exploration (MTX) unit supports the Programs and other Bureaus of Maine DOT by providing materials expertise, plant inspection, materials testing, and other services. MTX is comprised of a central testing laboratory in Bangor, two regional testing laboratories (Freeport and Presque Isle), a staff of field inspectors/testers, a geotechnical boring unit and a Falling Weight Deflectometer (FWD) unit.

Like the other areas of the Bureau, MTX has experienced a significant increase in workload with a corresponding decrease in staff. The following table presents the type and number of tests performed by various units of MTX during FFY 2002:

Testing Unit	Testing Performed	# Of Tests
Bituminous Lab Section	Hot Mix Asphalt (HMA) mix, pavement cores, liquid binder, emulsions	2207
Concrete/Structures Lab Section	concrete, rebar, admixtures, cement, pipe, deck cores, paint	553
Soils/Aggregate Lab Section	HMA/concrete aggregate, construction aggregate, proctors, geology samples, salt, winter sand	1502
Freeport Lab	HMA mix, pavement cores, gradations	1688
Presque Isle Lab	HMA mix, pavement cores, gradations	334
Field Acceptance Testing (MTX staff)	nuclear density, gradations	2712
Independent Assurance	nuclear density, guardrail, pipe, concrete, HMA	314
Field Testing by others	nuclear density, gradations	895
TOTAL		10,205



Key accomplishments of MTX this year are as follows:

- Acquisition of new, high-technology asphalt binder test equipment
- Replacement of concrete cylinder report form with Testing Information Management System (TIMS)-generated report
- Implementation of safety and environmental program and training of staff
- Renovation of soil/aggregate lab
- Staff NETTCP certifications
- AMRL/CCRL proficiency sample testing and on-site assessments for central lab
- AASHTO Accreditation of central lab
- Improving process of drilling projects requiring FWD data acquisition
- Revision of HMA specifications
- Improved testing turnaround times
- Distribution of test reports electronically
- Piloting of personal digital assistants (PDA's) for field sample and test data entry
- Continued development of TIMS and conversion to MS Access and Oracle
- Assistance with Locally Administered Projects.

Capital Resources

The Capital Resources Unit supports program delivery by the Bureau of Project Development and others in a variety of ways including managing federal funding resources, processing project financial data, executing project approval processes, representing Bureau interests in biennial and statewide transportation programming, management of the program/project management system (ProjEx), and development of Bureau performance and production measures/reports.



Capital Resources highlights and accomplishments during this past year include:

- Execution of 1,955 individual project financial transactions that committed federal funding to projects having a total value exceeding \$200 million, both substantial increases over 2001 and recent annual averages.
- Transfer of federal funds between Interstate and non-Interstate categories to provide more balance in available resources for programmed work.
- Further staff training in and enhancement of the new electronic signature process for federal aid project approvals, improving a fully automated process and increasing delivery efficiency.
- Continued implementation and enhancement of ProjEx:
 - Completed “Task 28” installation of new Roads Form, improving project scope descriptions and ProjEx interface with roadway inventory data.
 - Completed “Task 30” adjusting Planning Manager to allow direct production of a Biennial Transportation Improvement Program (BTIP), previously not possible from a central management system.
 - The number of ProjEx users continues to climb toward 400 with 50 new read only and update users trained.
 - Satellite databases adjusted to facilitate automated data entry.
 - Download of BTIP data from ProjEx to financial system tested, corrected and run successfully.
- Continued development and timely delivery of monthly, quarterly and annual reports on transportation improvement program delivery performance and production success.
- Creation and submission of nominations for national awards in Innovation, Environmental Excellence and Highway Design Excellence.
- Development of comprehensive trends analyses including:
 - Relative cost since 1982 of engineering, right-of-way and construction
 - Annual production since 1992 measured in projects, dollars and miles.
 - Comparison of project and non-project costs
 - Cyclical and annual contract payment levels
 - Consultant cost experience as a portion of total project/program cost.

Urban & Arterial Program

The Urban & Arterial Highway Program (Arterial) began to “stretch its wings” over the last 12 months. As the staff has gained experience with the new organization, production gains have become apparent. The 36 projects completed or essentially completed in 2002 are significantly more than the 17 completed one year ago. The number of projects advertised has increased from 25 to 38 over the same period. It is the goal of Arterial to advertise 42 projects in the coming year as further gains in efficiency are achieved.

Arterial highlights of the last year include:

- Start of construction on Route 9 in Amherst/Aurora, the final segment of full construction in the decade-long program to improve “The Airline” from Brewer to Calais. This year also saw the completion of Airline projects in Clifton/Amherst and T24MD.
- Completion of the new Stillwater Avenue/I-95 interchange in Bangor.
- Start of construction on the long-awaited “Third Bridge” in Augusta.
- The rapid-fire completion of over 4 miles of reconstruction on Route 117 in Hollis.
- Several “downtown” highway reconstruction projects that reached or neared completion were: Cornish-Route 5 (picture below), Madawaska-U.S. 1, Limerick-Route 11, Topsham-Main Street, Portland/So. Portland- Johnson Road, and Dover-Foxcroft-Route 6.
- Development of the Department’s first Design-Build contract for a highway project. The I-295 Connector in Portland is expected to be advertised in this manner in December of 2002.

Project output in Arterial increased a great deal from 2001 levels, with construction completion on 36 projects at a total value of nearly \$55 million. Arterial reconstructed or rehabilitated 50 miles of



highway and resurfaced 33 miles on the Interstate system. Delivery goals for 2003 are to begin construction work on 42 new projects, along with carry-over from the 38 projects begun in 2002. Arterial anticipates completing many miles of highway improvements in 2003 as its attack on the backlog of unreconstructed arterials picks up steam.



Completed Projects - Urban & Arterial



<u>Project Title</u>	<u>Scope Description</u>	<u>Value</u>
BANGOR, I-95 @ Stillwater Avenue	NEW HIGHWAY CONSTRUCTION	\$8,345,309
BRUNSWICK, Route 24	HIGHWAY IMPROVEMENTS	\$621,720
BRUNSWICK-FREEPORT, I-95 SB	LEVEL 1 HIGHWAY RESURFACING	\$4,174,429
CLIFTON-AMHERST, Route 9	HIGHWAY IMPROVEMENTS	\$3,572,935
DOVER-FOXCROFT, Route 6	HIGHWAY IMPROVEMENTS	\$1,915,943
EUSTIS, Off Road Truck Weigh Area	TRUCK WEIGH AREA	\$246,500
FORT KENT, U.S. Route 1	BIKEWAY	\$165,962
FREEPORT-YARMOUTH, I-95 SB	HIGHWAY IMPROVEMENTS	\$440,102
FRYEBURG, Route 5	HEAVY RESURFACING	\$1,158,439
FRYEBURG, U.S. Route 302	HEAVY RESURFACING	\$399,348
GRAY, Route 26 @ Wildlife Park	HIGHWAY IMPROVEMENTS	\$247,327
GREENWOOD-WOODSTOCK, Route 26	HIGHWAY REHABILITATION	\$2,395,506
HAMPDEN, U.S. Route 1A	LEVEL 3 HIGHWAY RESURFACING	\$1,955,973
HOLLIS, Route 117	HIGHWAY RECONSTRUCTION	\$5,165,636
KITTERY-YORK, I-95	TRUCK WEIGH AREA	\$370,748
LEWISTON, Mitchell Street	HIGHWAY RECONSTRUCTION	\$327,500
LISBON, Route 196	HIGHWAY IMPROVEMENTS	\$1,274,270
LITCHFIELD-W. GARDINER, Route 9/126	HIGHWAY IMPROVEMENTS	\$1,665,168
MADAWASKA, U.S. Route 1	HIGHWAY RECONSTRUCTION	\$2,614,932
MONMOUTH THRU W. GARDINER, Route 9	HIGHWAY IMPROVEMENTS	\$1,511,000
OAKFIELD, I-95 SB	LEVEL 1 HIGHWAY RESURFACING	\$923,389
OGUNQUIT, Shore & Oarweeds Road	BIKEWAY	\$462,500
PITTSFIELD to PALMYRA, I-95	LEVEL 1 HIGHWAY RESURFACING	\$2,803,217
PORTLAND, Congress Street	INTERSECTION IMP W/ SIGNAL	\$150,000
PORTLAND, U.S. Route 1	HIGHWAY RESURFACING	\$139,498
PORTLAND, Route 9	LEVEL 2 HIGHWAY RESURFACING	\$141,490
PORTLAND, Road 60192	LEVEL 2 HIGHWAY RESURFACING	\$60,666
PORTLAND, Road 60808	HIGHWAY RESURFACING	\$124,751
PORTLAND-SO. PORTLAND, Johnson Road	HIGHWAY RECONSTRUCTION	\$3,093,613
SABATTUS, Route 9	HIGHWAY RECONSTRUCTION	\$1,940,081
SACO, Route 112-Main to Park Street	LEVEL 1 HIGHWAY RESURFACING	\$77,000
SO. PORTLAND, Greenbelt Walkway	BIKE/PEDESTRIAN FACILITY IMPROVEMENTS	\$59,575
TOPSHAM to GARDINER, I-95	PAVEMENT REHABILITATION	\$493,191
TURNER, @ Route 4 & Snell Hill	INTERSECTION IMP W/O SIGNAL	\$292,613
TWP 24 MD-TWP 30 MD, Route 9	HIGHWAY RECONSTRUCTION	\$5,247,500
W. GARDINER-BRUNSWICK	BRIDGE CULVERT REHABILITATION	\$556,375

Augusta 3rd Bridge Project:

This view looks west from the Kennebec River and shows the beginnings of this \$35M project. A new bridge here, scheduled to open in 2004, will connect new sections of roadway now being built from Interstate 95 to Route 3 on the east side of Augusta.



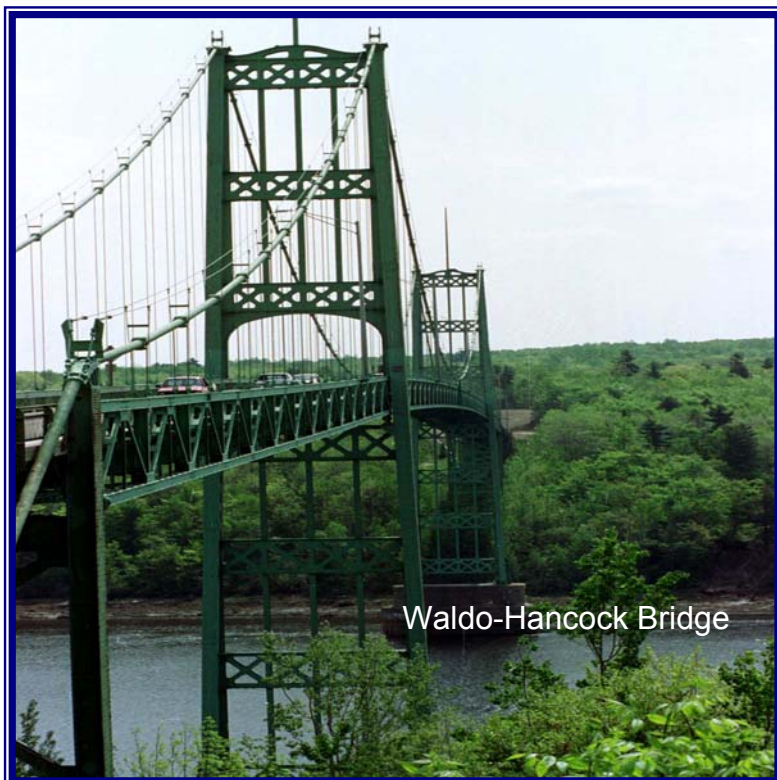
Augusta 3rd Bridge Site

Bridge Program

The Bridge Program (Bridge) responded in 2002 with another prolific year of developing and constructing bridge projects across the state. Bridge employees conducted 76 public hearings during the year. Production results included completion of construction on 41 projects at a value of \$53 million and beginning construction on another 52 projects at a value of \$49 million.

The People:

Bridge Program staffing has settled now at about 85, comprised of 8 managers, 5 project managers, 14 structural and geotechnical designers, 10 plan developers, 25 construction residents and inspectors, 6 real estate mappers and appraisers, 2 utility coordinators, 2 survey editors, 2 contract specialists, 5 clericals, 5 welding/shop inspectors, an information specialist and a survey coordinator. The organization centers around four regionalized multi-disciplined teams. Bridge continued managing a high staff turnover in 2002 bringing in 16 new people, 12 of whom were new hires. Despite the high turnover, Bridge remained a highly skilled and exceptionally productive unit with more cross-discipline activity and more cooperation between teams than ever before. Managers and staff are continuing development of an employee retention strategy, a human resource planning strategy, a project process map, a consultant training plan and improvements to communication/feedback.



The Products:

Bridge constructed and opened to traffic 18 bridge replacements, or new bridges and 26 bridge rehabilitations this past year at a value of \$59 million. Another 24 bridge replacements and 28 bridge rehabilitations at a value of \$49 million were advertised for construction. Among the more significant projects advertised for construction were replacement of the 3 Fairfield-Benton bridges, 3 Machias bridges, Biddeford-Saco, Ogunquit, and York; rehabilitation of the Waldo-Hancock suspension bridge cable and the Harrison-Otisfield historic bridge; and painting of 7 interstate bridges.

Our Performance:

Bridge projects delivered to advertising for 2002 exceeded both the number and total value scheduled for the year. A

success rate of 86% on time delivery was achieved for advertised projects, along with 84% on time delivery of construction completions, both exceeding the 80% goal set for 2002. Preliminary engineering costs continued to run better than the 13% goal at 10.5% of total costs, with construction engineering a little lower at about 10%, still well within its 12% goal. A formal quality assessment of completed bridge projects is also being inaugurated, based on safety, environmental compatibility, functionality and cost effectiveness.

The Bridge Program schedule for 2003 has 53 projects being advertised at a value of \$70 million. Among these will be painting/rehabilitation of Madawaska International Bridge, rehabilitation of Bangor I95 Kenduskeag River bridges, a new Augusta 3rd bridge with three other new Augusta bridges, a large bridge replacement in Canton, a bridge replacement in Orono, and the final rehabilitation project for the Bath-Woolwich Carlton Bridge.

Completed Projects - Bridge



<u>Project Title</u>	<u>Scope Description</u>	<u>Value</u>
ALTON, Route 43	BRIDGE REPLACEMENT	\$1,079,982
ALTON-OLD TOWN, Route 43	BRIDGE REPLACEMENT	\$572,027
ANSON, Marshall Bridge #1062	BRIDGE REPLACEMENT	\$82,246
AUBURN, Center Street Overpass	BRIDGE CONSTRUCTION-NEW	\$4,727,400
AUGUSTA, Bark Mulch Removal	SPECIAL PROJECT	\$100,000
AUGUSTA, I-95 Bond Brook Bridges	BRIDGE PAINTING	\$25,702
AUGUSTA, I-95 Interchange Bridge	BRIDGE DECK REPLACEMENT	\$802,312
AUGUSTA, I-95 RAMP "F0294" Bridge	BRIDGE DECK REPLACEMENT	\$566,191
AUGUSTA, Bond Brook NB Bridge #5787	BRIDGE PAINTING	\$587,697
AUGUSTA, Bond Brook SB Bridge #1466	BRIDGE PAINTING	\$587,388
BANGOR, Stillwater Avenue Bridge #0767	BRIDGE CULVERT REHABILITATION	\$138,945
BATH-WOOLWICH, U.S. Route 1	BRIDGE REHABILITATION	\$14,207,115
BEALS-JONESPORT, Bridge #5500	BRIDGE IMPROVEMENT	\$78,262
BELFAST, Veterans Memorial Bridge #5750	BRIDGE PAINTING	\$2,820,000
BIDDEFORD-SACO, Route 9	BRIDGE WIDENING	\$120,755
BUCKSPORT, Hurd Brook Bridge #5239	BRIDGE CULVERT REHABILITATION	\$110,563
DENMARK, Walker Bridge #0736	BRIDGE REPLACEMENT	\$498,281
FRIENDSHIP-WALDOBORO, Bridge #6396	BRIDGE REPLACEMENT	\$223,192
GEORGETOWN, Route 127 West Bridge	BRIDGE REPLACEMENT	\$1,686,674
GEORGETOWN, Route 127 East Bridge	BRIDGE REPLACEMENT	\$1,185,000
GREENE-TURNER, Center Bridge Road	BRIDGE SUBSTRUCTURE REHABILITATION	\$40,000
HOULTON, Highland Avenue Bridge	BRIDGE DECK REPLACEMENT	\$2,011,035
KENNEBUNKPORT, Glen Creek Bridge	BRIDGE REHABILITATION	\$188,887
KENNEBUNKPORT, Lords Bridge #5899	BRIDGE WEARING SURF REPLACEMENT	\$60,183
KENNEBUNK-WELLS, Bridge #1267	BRIDGE REPLACEMENT	\$382,484
KITTERY-PORTSMOUTH, Piscataqua Bridge	BRIDGE PAINTING	\$6,123,114
NEW SHARON, New Muddy Brook Bridge	BRIDGE REPLACEMENT	\$1,184,100
OLD TOWN, Mud Pond Inlet Bridge #2593	BRIDGE REHABILITATION	\$1,322,500
OXFORD, Meadow Bridge #6118	BRIDGE REPLACEMENT	\$188,964
PARSONSFIELD, Route 25	BRIDGE WIDENING	\$1,695,373
PARSONSFIELD-PORTER, Route 25	BRIDGE REPLACEMENT	\$5,116,553
PEMBROKE, Upper Crow Brook Bridge #5501	BRIDGE CULVERT REHABILITATION	\$93,043
POLAND, Potash Bridge #6393	BRIDGE REPLACEMENT	\$207,034
SO. BERWICK, Bennett Bridge #1237	BRIDGE REPLACEMENT	\$130,828
SOLON, U.S.201&Falls Brook	BRIDGE REHABILITATION	\$10,151
TEMPLE, Road 359, Bridge #2017	BRIDGE REPLACEMENT	\$96,289
WASHINGTON-UNION, Road 323	BRIDGE REPLACEMENT	\$486,461
WATERBORO, Carpenter Bridge #3829	BRIDGE CULVERT REHABILITATION	\$82,931
WEST GARDINER, 126/ I-95 Bridge #6321	BRIDGE PAINTING	\$292,827
YARMOUTH, Route 115	BRIDGE REPLACEMENT	\$3,100,728
YORK, U.S. Route 1-Rices's Bridge #2715	WETLANDS MITIGATION	\$41,000

Multimodal Program

The Multimodal Program once again, in 2002, answered the call for simpler, more cost effective delivery of projects both large and small. From cargo ports and passenger rail systems to fixing leaky windows, the Program continues to meet the challenges of non-traditional projects, each, it seems, with a unique set of complexities.

Multimodal staff consisted of only nine dedicated, innovative and very resourceful employees for most of 2002. The Program did lose a great deal of experience and expertise with one retirement, but the staff was bolstered with an additional Project Manager position necessitated by the ever-increasing project load in Multimodal. Other bureau programs were very gracious in providing assistance with construction oversight, survey and utility coordination when needed to complement Multimodal resources.

The Program continues to manage the delivery of projects for a variety of MaineDOT programs including: Enhancement, Rail Crossing, Industrial Rail Access (IRAP), Boating Infrastructure Grant (BIG), Ferry Service and Park and Ride. New in 2002, Multimodal has been asked to deliver a series of recently funded snowmobile bridge projects. Delivery of these programs is sustained by providing assistance to communities as they administer the projects at the local level.

In addition to the list of completed projects below, Multimodal has had a very busy construction year overseeing several major projects including:



Mack Point Cargo Port:

A \$16 M project to construct the final of three major cargo-shipping ports in the State. Significant project complexities include demolition of an old pier and its asbestos laden storage building, and disposal of contaminated waste dredged from the site. Engineers and scientists developed creative procedures to transform the unsuitable dredge spoils into suitable fill material. This project is nearly 60% complete.

Rockland Branch Rehabilitation: A 56-mile, \$30 M rail rehabilitation project from Brunswick to Rockland for the restoration of passenger service. This project, nearing completion, is a small construction program in itself including bridge and highway work, ditching, deep culvert replacement and rail crossings. The major component of the project, which is new to MaineDOT, is laying over 260,000 track feet of continuously welded rail. Multimodal staff has also had to coordinate operations of the contractor and the rail operator to get the project built while maintaining freight service to rail customers along the line.



Completed Projects - Multimodal

<u>Project Title</u>	<u>Scope Description</u>	<u>Value</u>
ARUNDEL, Road 853	R/H CROSSING SIGNAL INSTALL/REHAB	\$149,686
ARUNDEL, Road C516N	R/H CROSSING RECON/REHAB W/ SIGNAL	\$71,049
ARUNDEL, Road C516N	R/H CROSSING REHAB SIGNAL	\$116,658
AUBURN, High Street	R/H CROSSING REHAB W/ SIGNAL	\$164,340
AUBURN, Intermodal Terminal	INTERMODAL CARGO FACILITY IMPROVEMENT	\$834,388
BATH, Old Bath Road U.P. Bridge	RAIL LINE REHABILITATION	\$214,655
BEALS-JONESPORT, Bridge #5500	BRIDGE REHABILITATION	\$671,155
BERWICK, Berwick Road Crossing	R/H CROSSING REHAB W/ SIGNAL	\$144,520
BOOTHBAY HARBOR	INTERMODAL PASS. FACILITY CONSTRUCTION	\$50,000
CRANBERRY ISLE	BOATING INFRASTRUCTURE PROJECT	\$8,000
DEBLOIS, Runway 15-33	AIRPORT IMPROVEMENTS	\$201,198
FREEPORT, Main Street Area	PARK AND RIDE FACILITY CONSTRUCTION	\$160,956
HARRINGTON	INTERMODAL PASS. FACILITY CONSTRUCTION	\$48,500
OLD ORCHARD BEACH, Road 40022	R/H CROSSING SIGNAL INSTALL/REHAB	\$181,449
PORTAGE LAKE	RAIL OPERATIONAL IMPROVEMENTS	\$50,455
SEARSPORT, Mack Point	SPECIAL PROJECT	\$1,394,830
SWANS ISLAND	BIKE/PEDESTRIAN TRAIL DEVELOPMENT	\$39,753
VINALHAVEN, Pier	FERRY FACILITY IMPROVEMENTS	\$4,000,000
WELLS, Road 728	R/H CROSSING REHAB SIGNAL	\$134,100
WELLS, Road 728	R/H CROSSING RECON/REHAB W/ SIGNAL	\$72,401
YARMOUTH, Park & Ride	LIGHTING	\$24,971



Regional Program

The Regional Program (Regional) continued in 2002 to begin construction on a high volume of work and complete a high percentage of the work underway (see following list). Program staff has also continued moving forward implementing new technology and growing new relationships with Division Maintenance & Operations forces.

Regional Program (Continued)

The Regional Program continues to use foamed asphalt, contracting out 40 miles of highway for foaming this past season. Orient - U.S. 1, Macwahoc - U.S. 2A, Chesterville-Farmington - Route 156, Belgrade-Oakland - Route 11, and Easton - Route 10 are just some of the projects begun or completed this season.

Maintenance forces are becoming a valuable partner on numerous Regional projects by providing ditching and culvert replacement ahead of the Regional roadway work. This valuable relationship enabled Regional to complete more miles of resurfacing, thus increasing miles of smooth road available to travelers and reducing the need for excessive maintenance. It's a partnership area that has just begun to develop.

The following table summarizes the ditching in Division 7 on Regional projects:

<u>Town</u>	<u>PIN</u>	<u>Ditching Cost **</u>	<u>Cu. Yds. Material</u>	<u>Linear Feet of Ditching</u>	<u>\$/Foot</u>
Fryeburg	10698.00	\$5,412.46	535	3,224	\$1.68
Fryeburg	10697.00	\$5,375.29	364	4,550	\$1.18
Lovell	10710.00	\$18,176.05	2,632	6,186	\$2.94
Hiram	10700.00	\$21,349.74	7,761	12,512	\$1.71
Lisbon	10708.00	\$11,582.47	1,990	3,437	\$3.37
Carrabassett	10695.00	\$22,653.20	1,150	1,850	\$7.43

**** Prices include replacement of culverts**



Ditching work on a long stretch of Route 10 in Easton done by Division 1 maintenance forces before applying foamed asphalt.

Completed Projects - Regional



<u>Project Title</u>	<u>Scope Description</u>	<u>Value</u>
ADDISON to JONESPORT, Route 187	GUARDRAIL PROJECT	\$49,649
ALFRED-HOLLIS, Route 202	GUARDRAIL PROJECT	\$82,433
APPLETON, Route 105	CULVERT REPLACEMENT	\$6,979
ASHLAND, Road 305	HEAVY STATE REHABILITATION	\$365,000
ASHLAND-NASHVILLE, Route 11	LEVEL 2 HIGHWAY RESURFACING	\$1,544,227
AUBURN, Route 11/121	LEVEL 1 HIGHWAY RESURFACING	\$114,558
AUBURN, Route 136	LEVEL 2 HIGHWAY RESURFACING	\$453,793
AUBURN, Route 136	LEVEL 2 HIGHWAY RESURFACING	\$453,793
AUBURN, Route 4	LEVEL 2 HIGHWAY RESURFACING	\$279,902
AUBURN, Route 4	LEVEL 2 HIGHWAY RESURFACING	\$1,221,692
AUBURN, Minot Avenue	LEVEL 2 HIGHWAY RESURFACING	\$1,116,022
AUBURN-TURNER, Route 4	GUARDRAIL PROJECT	\$91,569
AUGUSTA to BELGRADE, Routes 8/11/27	LEVEL 2 HIGHWAY RESURFACING	\$1,544,572
AUGUSTA, Overlay	PAVEMENT REHABILITATION	\$157,599
AUGUSTA, Route 105	LEVEL 2 HIGHWAY RESURFACING	\$555,073
AUGUSTA-SIDNEY, Route 104	HIGHWAY IMPROVEMENTS	\$2,196,128
AUGUSTA-SIDNEY, Route 104	LEVEL 2 HIGHWAY RESURFACING	\$250,000
BALDWIN, Routes 5/117	LEVEL 2 HIGHWAY RESURFACING	\$158,649
BANGOR, Road 10282	LEVEL 2 HIGHWAY RESURFACING	\$79,606
BANGOR, Route 2	LEVEL 2 HIGHWAY RESURFACING	\$879,508
BANGOR, Route 2	LEVEL 2 HIGHWAY RESURFACING	\$193,281
BELFAST, Route 7	HIGHWAY IMPROVEMENTS	\$3,496,000
BELGRADE-SMITHFIELD, Route 8	HIGHWAY IMPROVEMENTS	\$2,001,804
BIDDEFORD to LYMAN, Route 5	LEVEL 2 HIGHWAY RESURFACING	\$1,016,723
BIDDEFORD, South Street	CULVERT REPLACEMENT	\$55,000
BINGHAM, Route 201	LEVEL 1 HIGHWAY RESURFACING	\$160,403
BLUE HILL, Route 176	STATE RECONSTRUCTION	\$150,000
BLUE HILL, Route 176	HIGHWAY IMPROVEMENTS	\$225,000
BRADLEY-MILFORD, Route 178	LEVEL 1 HIGHWAY RESURFACING	\$388,176
BROOKS, Route 7-Brooks Road Crossing	R/H CROSSING REHAB W/O SIGNAL	\$20,500
BURLINGTON, Road 723	HIGHWAY IMPROVEMENTS	\$75,000
CAMBRIDGE - PARKMAN, Route 150	LEVEL 1 HIGHWAY RESURFACING	\$225,198
CARIBOU to NEW SWEDEN, Route 161	LEVEL 2 HIGHWAY RESURFACING	\$1,533,295
CARY PLT, U.S. Route 1	CULVERT REPLACEMENT	\$110,305
COLUMBIA, U.S. Route 1	BRIDGE CULVERT REHABILITATION	\$56,500
CORNISH to PARSONSFIELD, Route 25	LEVEL 2 HIGHWAY RESURFACING	\$374,504
CORNVILLE, Route 150	HIGHWAY RECONSTRUCTION	\$402,500
CORNVILLE, Route 150	CULVERT REPLACEMENT	\$49,000
CUSHING, River Road	HIGHWAY REHABILITATION	\$37,000
DAMARISCOTTA, Biscay Road	HIGHWAY IMPROVEMENTS	\$118,000
DEXTER, Route 23	CULVERT REPLACEMENT	\$35,000
EASTON, Route 10	FOAMED ASPHALT	\$130,000
EDDINGTON, Route 178	LEVEL 1 HIGHWAY RESURFACING	\$108,921
EDDINGTON, Route 178	LEVEL 1 HIGHWAY RESURFACING	\$113,929
EDMUNDS TWP, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$477,160
FARMINGTON-JAY, Route 133	HIGHWAY IMPROVEMENTS	\$1,959,000
FORT FAIRFIELD, Route 161	LEVEL 1 HIGHWAY RESURFACING	\$363,421
FORT FAIRFIELD, Route 161	LEVEL 1 HIGHWAY RESURFACING	\$120,242
FORT FAIRFIELD, Routes 1A/167	LEVEL 1 HIGHWAY RESURFACING	\$1,189,334
FREEMAN TWP, Route 142	BRIDGE CULVERT REPLACEMENT	\$25,258
FREEPORT, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$392,540
GORHAM, Routes 4/202	LEVEL 2 HIGHWAY RESURFACING	\$110,146

Completed Projects - Regional (Continued)



GORHAM, Route 202	LEVEL 2 HIGHWAY RESURFACING	\$635,715
GORHAM, Route 25	LEVEL 1 HIGHWAY RESURFACING	\$66,207
GREENE, Routes 11/100/202	LEVEL 2 HIGHWAY RESURFACING	\$856,500
GREENE, Routes 11/100/202	LEVEL 2 HIGHWAY RESURFACING	\$856,500
GUILFORD, Routes 6/15/16	LEVEL 1 HIGHWAY RESURFACING	\$169,566
HARMONY-CAMBRIDGE, Route 150	LEVEL 2 HIGHWAY RESURFACING	\$522,600
HAYNESVILLE, Ferry Road	SPECIAL PROJECT	\$17,951
JACKMAN to SANDY BAY, Route 201	LEVEL 2 HIGHWAY RESURFACING	\$2,120,000
JACKMAN, Route 6	LEVEL 1 HIGHWAY RESURFACING	\$206,005
JEFFERSON to AUGUSTA, Route 17	LEVEL 1 HIGHWAY RESURFACING	\$1,276,000
KITTERY, Road 30151	LEVEL 1 HIGHWAY RESURFACING	\$77,824
KITTERY, Routes 236 and 236S	LEVEL 2 HIGHWAY RESURFACING	\$190,590
KITTERY, Route 103	LEVEL 2 HIGHWAY RESURFACING	\$115,700
KITTERY, Route 236	LEVEL 2 HIGHWAY RESURFACING	\$241,299
KOSSUTH TWP.-TOPSFIELD, Route 6	HIGHWAY IMPROVEMENTS	\$2,649,250
LEE to SPRINGFIELD, Route 6	LEVEL 2 HIGHWAY RESURFACING	\$804,142
LEE, Route 168	HIGHWAY RECONSTRUCTION	\$150,000
LEVANT-HERMON, Route 222	HIGHWAY IMPROVEMENTS	\$2,275,680
LEWISTON, Route 126	LEVEL 1 HIGHWAY RESURFACING	\$220,000
LIMINGTON, Route 25	LEVEL 1 HIGHWAY RESURFACING	\$200,291
LINCOLN, Route 6	LEVEL 2 HIGHWAY RESURFACING	\$714,484
LINCOLN, Routes 2/6	LEVEL 2 HIGHWAY RESURFACING	\$208,203
LINCOLN, Routes 2/6	LEVEL 2 HIGHWAY RESURFACING	\$75,772
LITCHFIELD, Route 197	CULVERT REPLACEMENT	\$87,999
LUBEC, Route 189	SPECIAL PROJECT	\$150,000
MACHIAS-WHITNEYVILLE, Route 192	HIGHWAY REHABILITATION	\$87,831
MADISON to SOLON, Route 201	LEVEL 2 HIGHWAY RESURFACING	\$2,865,402
MADISON, Route 201	CULVERT REPLACEMENT	\$61,301
MECHANIC FALLS, Route 121	LEVEL 2 HIGHWAY RESURFACING	\$292,468
MEXICO, Route 17	LEVEL 2 HIGHWAY RESURFACING	\$301,209
MILLINOCKET, Road C301K	HIGHWAY IMPROVEMENTS	\$93,762
MOLUNKUS TWP/TAR5 WELS, Route 2	BRIDGE CULVERT REPLACEMENT	\$34,500
NEW SWEDEN, Station Road	GUARDRAIL PROJECT	\$20,000
NEWCASTLE, Route 215 @ Route 194	HIGHWAY RECONSTRUCTION	\$138,464
NEWRY, Road 310	PAVEMENT REHABILITATION	\$235,000
NOBLEBORO to WALDOBORO, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$689,274
PARKMAN, Route 150	LEVEL 1 HIGHWAY RESURFACING	\$126,353
PERRY to EASTPORT; Route 190	LEVEL 2 HIGHWAY RESURFACING	\$836,543
PERU to RUMFORD, Route 108	LEVEL 2 HIGHWAY RESURFACING	\$1,024,085
PITTSTON, Route 126	LEVEL 2 HIGHWAY RESURFACING	\$338,782
POLAND, Route 122 & Empire Road	SPECIAL PROJECT	\$461,500
PRENTISS PLT, Route 169	MEDIUM STATE REHABILITATION	\$189,173
PRENTISS PLT, Route 169	STATE RECONSTRUCTION	\$128,439
PRESQUE ISLE, Route 10	BRIDGE CULVERT REPLACEMENT	\$204,000
PROSPECT, North Searsport Road	LIGHT STATE REHABILITATION	\$36,000
RANDOLPH, Route 226	LEVEL 1 HIGHWAY RESURFACING	\$104,215
RANDOLPH, Route 226	LEVEL 2 HIGHWAY RESURFACING	\$273,299
RANDOLPH, Route 9	LEVEL 2 HIGHWAY RESURFACING	\$200,191
ROBBINSTON to CALAIS, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$303,597
RUMFORD, Route 108	LEVEL 2 HIGHWAY RESURFACING	\$487,152
RUMFORD, Route 2	LEVEL 2 HIGHWAY RESURFACING	\$286,731
RUMFORD, Route 2	GUARDRAIL PROJECT	\$22,060
SACO, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$58,500

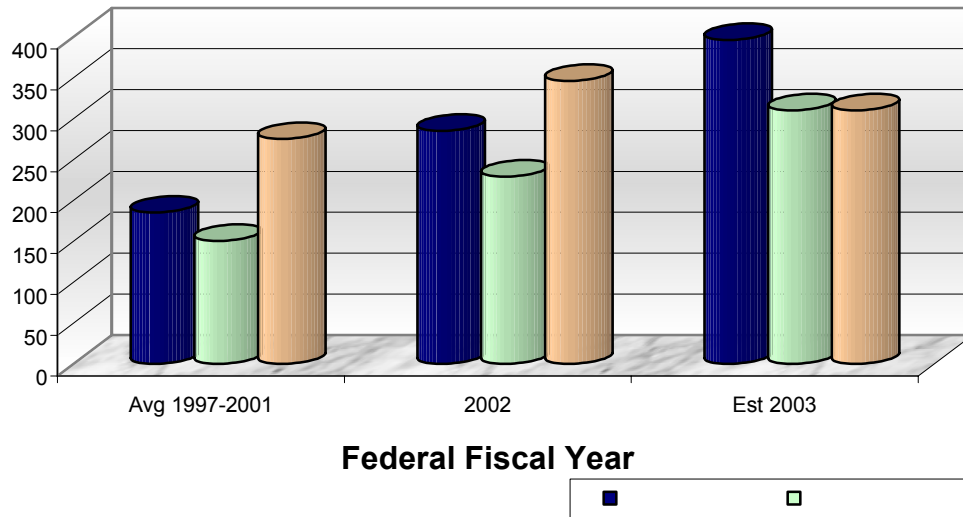
Completed Projects - Regional (Continued)

SALEM TWP, Route 142	BRIDGE CULVERT REPLACEMENT	\$17,390
SCARBOROUGH, U.S. Route 1	LEVEL 1 HIGHWAY RESURFACING	\$253,229
SCARBOROUGH, Payne Road	CULVERT REPLACEMENT	\$100,000
SEARSPORT, U.S. Route 1	CULVERT REPLACEMENT	\$46,721
SEARSPORT-STOCKTON SPRINGS, U.S. Route 1	LEVEL 1 HIGHWAY RESURFACING	\$373,091
SEBEC, Route 6/16	CULVERT REPLACEMENT	\$89,000
SEBEC, Route 6/16	CULVERT REPLACEMENT	\$23,000
SHERMAN, Route 158	LEVEL 1 HIGHWAY RESURFACING	\$902,136
SIDNEY-WATERVILLE	HIGHWAY IMPROVEMENTS	\$1,201,100
SMITHFIELD, Route 8/11	LEVEL 1 HIGHWAY RESURFACING	\$742,716
SPRINGFIELD, Route 6	LEVEL 2 HIGHWAY RESURFACING	\$761,128
STRONG, Route 149	HIGHWAY IMPROVEMENTS	\$37,838
SULLIVAN, U.S. Route 1	CULVERT REPLACEMENT	\$24,000
SWANVILLE, Route 131 @ Route 141	INTERSECTION IMP W/O SIGNAL	\$65,000
THOMASTON, Wadsworth Street	HIGHWAY IMPROVEMENTS	\$80,000
TOPSHAM, Meadow Road	HIGHWAY IMPROVEMENTS	\$35,348
TOPSHAM, Route 24	MEDIUM STATE REHABILITATION	\$340,820
TRENTON, Route 230	GUARDRAIL PROJECT	\$80,000
TURNER, Route 4	LEVEL 1 HIGHWAY RESURFACING	\$300,599
TURNER, Route 4	LEVEL 2 HIGHWAY RESURFACING	\$433,737
VAN BUREN, Road D050	LEVEL 1 HIGHWAY RESURFACING	\$60,771
VAN BUREN, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$82,988
VAN BUREN, U.S. Route 1	LEVEL 2 HIGHWAY RESURFACING	\$230,301
W. FORKS thru JACKMAN, Route 201	GUARDRAIL PROJECT	\$166,840
W. FORKS to JACKMAN, Route 201	LEVEL 2 HIGHWAY RESURFACING	\$1,930,533
W. PARIS, Road C555O	PAVEMENT REHABILITATION	\$130,000
WALDOBORO, Manktown Road	HIGHWAY REHABILITATION	\$80,000
WALDOBORO, U.S. Route 1	LEVEL 1 HIGHWAY RESURFACING	\$345,145
WALDOBORO, Route 32	HIGHWAY IMPROVEMENTS	\$42,761
WALLAGRASS-FT. KENT, Route 11	HIGHWAY IMPROVEMENTS	\$3,432,180
WASHBURN, Route 164	CULVERT REPLACEMENT	\$105,000
WATERVILLE, Route 104	LEVEL 2 HIGHWAY RESURFACING	\$248,060
WATERVILLE, Route 104	LEVEL 2 HIGHWAY RESURFACING	\$550,000
WELD, Route 156	HIGHWAY IMPROVEMENTS	\$101,929
WELLS, U.S. Route 1	LEVEL 3 HIGHWAY RESURFACING	\$2,552,148
WHITNEYVILLE, U.S. Route 1A	GUARDRAIL PROJECT	\$9,262
WINN, Route 168	HIGHWAY IMPROVEMENTS	\$100,000
WINSLOW, Route 201	LEVEL 2 HIGHWAY RESURFACING	\$1,316,400
WINTERPORT, Road 781	HIGHWAY IMPROVEMENTS	\$211,448



And of course Regional management is always looking for more work...

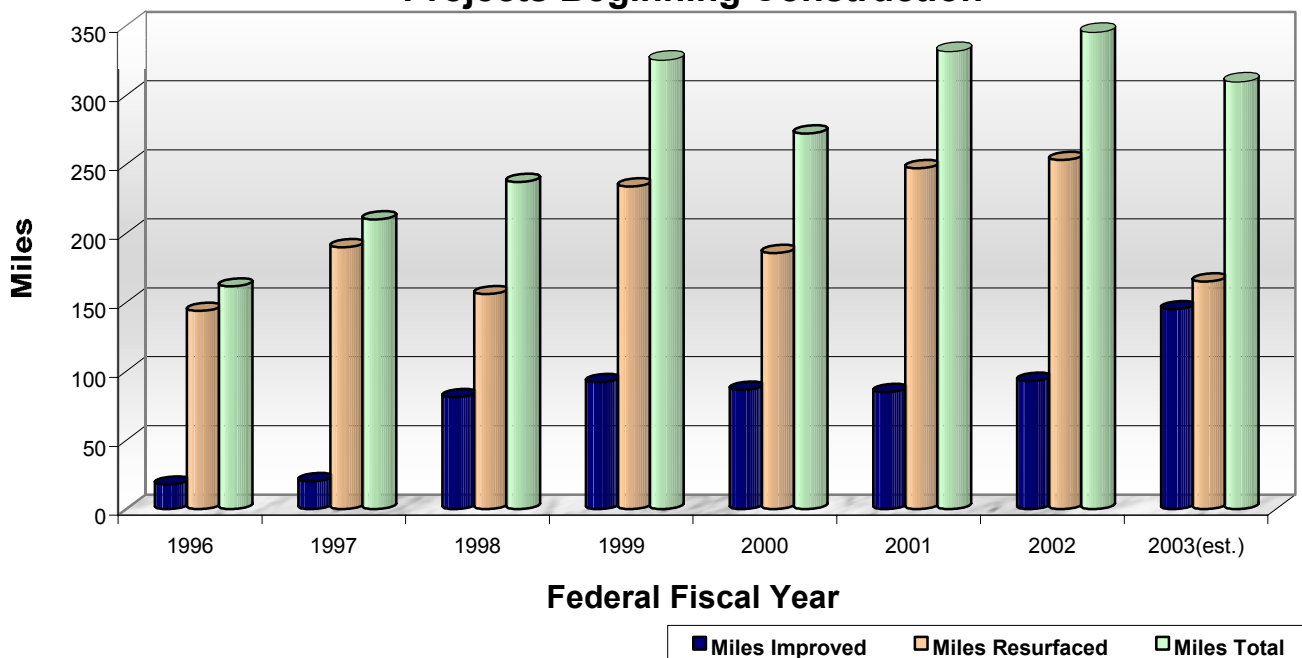
Projects Beginning Construction



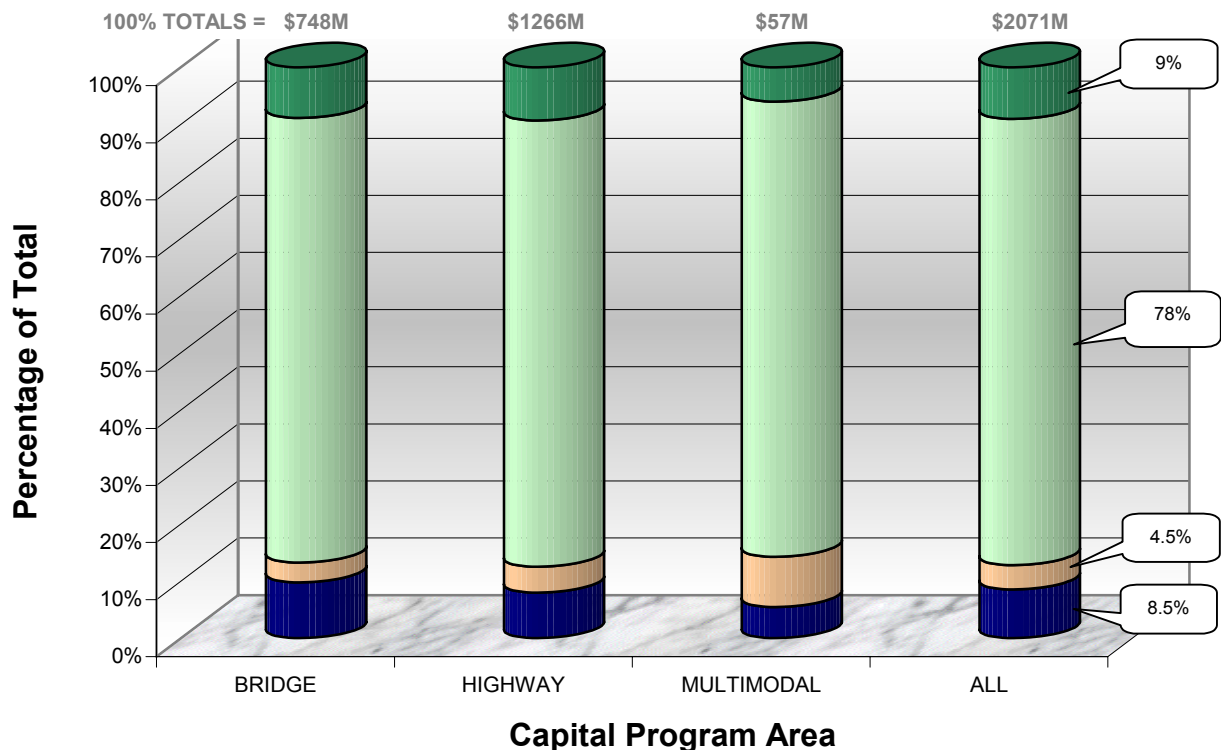
Projects beginning construction have increased annually as shown in the chart above. The number of projects, project value and roadway miles were all above the most recent 5-year average. Total miles of completed work are projected to drop in 2003, but as explained below, this is an expected result.

The graph below details by year our progress in starting the construction phase. Each biennium shown, except 2002-2003, reflects higher resurfacing mileage in the second year, while highway improvement mileage has been flat. The outcome projected for 2002-2003 is an improved result, since it is more desirable to push resurfacing work out early before roadway conditions worsen and become more costly to fix. Highway improvement projects, on the other hand, take longer to develop and should, if we deliver the whole program, result in more work the second year.

Projects Beginning Construction



Transportation Project Cost Efficiency



This chart measures only Capital Program projects found in PROMIS that have been "closed", "withdrawn", or placed in some form of "final voucher" status over the past 20 years (about 4,000 PINs).

Efficiency as shown above is measured by the relative value of product vs. process. Two decades of data show that the Bureau has succeeded in delivering 78% of program value to construction product. Recent results, as shown in our 2000 and 2001 Reports, indicate improvement over the last few years to the 80% level.

Summary:

We are delivering Maine's transportation improvement program, as reported now in each of the last 3 fall seasons. These Reports document great change and steady improvement. The Bureau of Project Development has transformed itself and is developing new relationships. Our work produces positive results that strengthen the economy. Thousands of long-term jobs are being created as the transportation system is improved at a record pace.

We are on the right track, but it is clear that both old and new challenges still face us. Competing customer expectations and priorities come from all directions. There are constant demands for change as our tools and our processes evolve. Despite the Department and Bureau leadership being in transition, we continue to set ambitious goals for the coming year. The Bureau of Project Development, as reported here, is establishing a record of continuous improvement and effective program delivery. We expect our production performance in 2003 to be at the top of the charts as well.

Sunrise!!



*There's a unique quality to our present.
The challenges of a new day shine before us.
Still, we take pride in all that we have accomplished...*